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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,661	09/08/2003	Hiroshi Kashiwagi	KON-1821	2782
20311	7590	01/11/2006	EXAMINER	
LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			CHEA, THORL	
		ART UNIT	PAPER NUMBER	
		1752		

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/657,661	KASHIWAGI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thori Chea	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 October 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

1. This office action is responsive to the amendment on October 18, 2005; claims 1-13 are pending in this instant application.
2. Applicant's arguments with respect to claims 1-4, 6, 10-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-4, 6, 10-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed fails to provide support for the term "organic dopant" and new limitations "'wherein the silver halide grains comprise an organic dopant capable of trapping an electron inside of the grains; wherein the organic dopant is an organic compound comprising chalcogen or nitrogen; wherein the organic dopant is added after nucleus formation and during grain growth so that the organic dopant is inside the silver halide grains" in claim 1. See also the term "organic dopant" in claim 6.

The applicants point out that "Claim 1 has further been amended to recite that the organic dopant is added after nucleus formation and during grain growth so that the organic dopant is

located inside the grains. Support for this amendment can be found at page 23, lines 6-15 of the application”.

Page 23, lines 6-15 discloses “Compounds, which provide these metal ions or complex ions, are preferably incorporated into silver halide grains through addition during the silver halide grain formation. These may be added during any preparation stage of the silver halide grains, that is, before or after nuclei formation, growth, physical ripening, and chemical ripening. However, these are preferably added at the stage of nuclei formation, growth, and physical ripening; furthermore, are preferably added at the stage of nuclei formation and growth; and are most preferably added at the stage of nuclei formation.”. The terms such as “organic dopant”, and “organic dopant capable of trapping an electron inside of the grains” and “organic dopant is an organic compound comprising chalcogen or nitrogen” are not found. Page 19, lines 14-15 discloses, “electron trapping dopant is an element of compound”; and lines 18-22 disclose “Examples thereof includes chalogen or nitrogen organic or inorganic compound”.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4, 6, 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of protection sought for “organic dopant” is indefinite since the specification fails clearly define the mete and bound thereof.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no antecedent basis for the limitation: ““wherein the silver halide

grains comprise an organic dopant capable of trapping an electron inside of the grains; wherein the organic dopant is an organic compound comprising chalcogen or nitrogen; wherein the organic dopant is added after nucleus formation and during grain growth so that the organic dopant is inside the silver halide grains" in claim 1. See also the term "organic dopant" in claim 6

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4, 6, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Keyzer et al (US Patent No. 6,277,549) in view Fukui et al (US 2002/0102502) or Patent Specification 1 543 226 (PS'226).

De Keyzer et al disclose a photothermographic material substantially as claimed. See the photothermographic material contains light-insensitive silver salt of an aliphatic carboxylic acid, photosensitive silver halide, a reducing agent for silver ions and binder column 14, lines 31-67; column 15, lines 1-67; column 16, lines 1-65; the silver halide grains are doped with an organic hole-trapping dopant according to formula (I0 and (II) in the abstract; the hole-trapping dopant incorporated in silver halide during the growth phase or step of the silver halide grains in column 3, lines 56-64; the silver halide grains including silver chloride, silver bromide, silver iodide and silver bromoiodide in column 8, lines 19-43; silver halide grains having grains size between 0.01 to 1.5 in column 10, lines 24-32, the amount of organic hole-trapping dopant in amount of

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$10^{-8}$  to  $10^{-2}$  mole per mole of silver of silver in column 7, lines 12-20; and the reducing agent bisphenols in column 16, lines 30-40.

Fukui et al column 38, claim 1, 11; pages 23, Example 1, [241] to [0273] to pages 24, 26; Table 1, samples 7-9, 14-16 discloses a photothermographic material containing silver halide, silver salt of an aliphatic carboxylic acid, reducing agent and the compound of formula (1) of the present claimed invention. PS'226 discloses the bisphenols as reducing agent for silver ions on page 15.

De Keyzer et al fails to specifically discloses the bisphenols of formula (I) claimed in the present claimed invention, but this bisphenols compound have been known in Fukui et al and PS'226. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to known bisphenols reducing agent taught in either Fukui et al or PS'226 as reducing for silver ions taught in De Keyzer et al, and thereby provide a material as claimed. The ratio  $S_B/S_A \leq 0.2$  present in the claims is considered as functional limitation, and the material obtained by the combination of the applied prior art would produce such ratio when developed similar condition.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Keyzer et al (US Patent No. 6,277,549) in view Fukui et al (US 2002/0102502) or Patent Specification 1 543 226 (PS'226) as applied to claims above, and further in view of EP'0962812A1 (EP'812). EP'812 discloses silver salt of a fatty acid having average equivalent sphere diameter of 0.1 micron to 0.8 micron and an average thickness of 0.01 micron to 0.20 micron which provide a photothermographic material with excellent antifogging and image stability. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use silver

salt of fatty acid having grain size taught in EP'812 for same reason, and thereby provide a material as claimed.

11. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being obvious over Takiguchi et al (US 2003/0203323) in view of Fukui et al (US 2002/0102502) or Patent Specification 1 543 226 (PS'226). Takiguchi et al discloses the electron trapping dopants such as organic compounds comprising nitrogen atom in page 4, [0065] and page 5, 0075]. Fukui et al column 38, claim 1, 11; pages 23, Example 1, [241] to [0273] to pages 24, 26; Table 1, samples 7-9, 14-16 discloses a photothermographic material containing silver halide, silver salt of an aliphatic carboxylic acid, reducing agent and the compound of formula (1) of the present claimed invention. PS'226 discloses the bisphenols as reducing agent for silver ions on page 15, formula (II). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use a known reducing agent taught in Fukui et al or PS'226 as reducing agent for silver ions taught in Takiguchi et al, and thereby provide a material as claimed.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in

the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-4, 6, 10-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 15, 17 of copending Application No. 10/379,779 in view of Fukui et al (US 2002/0102502) or Patent Specification 1 543 226 (PS'226). The invention claimed in the present invention and that claimed in the copending application differs in the use of reducing agent of formula (1), but this reducing agent has been known in Fukui et al (US 2002/0102502) or Patent Specification 1 543 226 (PS'226). Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to known bisphenols reducing agent taught in either Fukui et al or PS'226 as

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reducing for silver ions claimed in the copending application, and thereby provide same invention.

This is a provisional obviousness-type double patenting rejection.

*Conclusion*

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *th*  
December 29, 2005



Thorl Chea  
Primary Examiner  
Art Unit 1752